

Appl. No.: 10/696,052
Amdt. Dated: November 6, 2007
Reply to Office Action of: April 11, 2007

REMARKS/ARGUMENTS

1. Priority

Applicants thank the examiner for the acknowledgement of the claim for foreign priority based on the application filed first in the European Patent Office 29 October, 2003. Please find enclosed the Certified Copy of the foreign priority application EP 02292688.5 filed October 29, 2002.

2. Drawings

Applicants thank the Examiner for indicating in the accompanying form PTO-948 that the formal drawings previously submitted have been approved.

3. Election/Restriction

Applicant notes with appreciation the acknowledgement of Applicants' election of Group I, species A1 and B1 which includes claims 1, 2, 5-9, and 14 - 18.

4. § 103 Rejections

Claims 1, 2, 5 - 9 and 14 - 18 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Tonkovich, et al (WO 01/12312) in view of Hammel, et al, (US 3,843,341). (The patent number for Hammel is given at page 3 of the Action as 4,803,188, but it appears that 3,843,341 was intended.)

Claims 1, 2, 5 - 9 and 14 - 18 also stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Claus, et al (Catalysis Today 67 (2001) 319-339) in view of Hammel, et al (US 3,843,341).

Claim 1 has been amended herein to recite that "the plurality of microchannel walls comprise a frit of a material selected from the group consisting of glass and glass-ceramic and combinations thereof."

Tonkovich discloses that:

The catalyst walls 840, 842 can be ceramic (for high temperature operation), metal (for good thermal conductivity), composites, or porous catalyst (for additional reactivity and/or addition or removal of gas components).

(Page 14, lines 20-22.) Tonkovich does not teach or suggest glass as material for walls, particularly not glass or glass-ceramic frit. Tonkovich may even be considered to teach away from glass, given the list of materials and desired properties, as ceramic is generally understood as having higher temperature capabilities and higher thermal conductivity

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capabilities than glass, and metal is generally of higher thermal conductivity than ceramic. Hammel adds nothing in this regard. Hamel deals with glass beads (see, for example, Fig. 1, the forth process step in the flowchart, in which the glass is beaded). The beads are intended for use as a catalyst carrier or support, and are made porous and then coated with catalyst by the processes described. Frit is generally defined as a powdered material such as typically obtained by grinding or similar process, and as such typically contains highly non-uniform particles, and not the uniform and smooth particles typically of glass beads. Accordingly, Hammel does not suggest use of glass frit. Further, as far as applicants are aware, there is no suggestion in Hammel of forming walls of such beads, particularly not walls of a pressure-containing or pressure-resistant reactor as disclosed in the present application. For at least these reasons, claim 1 and the claims depending therefrom are believed to be allowable over Tonkovich in view of Hammel.

As noted by the Examiner, Claus does teach that glass may be included among the materials used to form the multiple "microstructured catalyst inlays" placed in parallel within the reactor module of Fig. 10(a) (page 329), which is intended for high-throughput parallel screening of multiple catalysts in a research or laboratory setting. However, there is no suggestion of a "plurality of microchannel walls compris[ing] a frit of a material selected from the group consisting of glass and glass-ceramic and combinations thereof" in the context of a catalyst-containing reactor as recited in the claim. As described immediately above, Hamel adds nothing in this regard. For at least these reasons, claim 1 and the claims depending therefrom are believed to be allowable over Claus in view of Hammel.

5. Double Patenting

Claims 1, 2, 5 – 9 and 14 – 18 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1 - 17 of co-pending application 11/016,093.

Claims 1, 2, 5, 6 and 16 – 18 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1 - 13 of co-pending application 11/016,645.

Applicants acknowledge the provisional rejections.

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7. Conclusion

Based upon the above amendments, remarks, and papers of record, Applicant believes the pending claims of the above-captioned application are in allowable form and patentable over the prior art of record. Applicant respectfully requests reconsideration of the pending claims and a prompt Notice of Allowance thereon.


Claims 1, 2, 5-9 and 14-18 remain in this application. Claim 1 has been amended. Claims 3, 4, 10-13 and 19-25 have been withdrawn as a result of an earlier restriction requirement, which claims applicants retain the right to present in a divisional application.

Applicants believe that a three-month extension of time is necessary to make this Reply timely. Should applicants be in error, applicants respectfully request that the Office grant such time extension pursuant to 37 C.F.R. § 1.136(a) as necessary to make this Reply timely, and hereby authorizes the Office to charge any necessary fee or surcharge with respect to said time extension to the deposit account of the undersigned firm of attorneys, Deposit Account 03-3325.


Please direct any questions or comments to Gregory V. Bean at 607-974-2698.

6 Nov 2007

Date

CERTIFICATE OF TRANSMISSION UNDER 37 C.F.R. § 1.8
I hereby certify that this correspondence is being faxed to the United States Postal Service at 571-273-8300 Mail Stop Amendment, Commissioner of Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on:
6 Nov 07
Date

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Respectfully submitted,
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